

Application No. 10/527,678
Response 2

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1-180. (Cancelled)

181. (Presently Amended) A composition comprising an isolated conformational epitope of an amyloid which a) forms in a human or animal and b) contributes to amyloid disease;

said epitope being affixed to a curved or flat support surface to thereby constrain the epitope in a conformation that will result in recognition of the epitope by a desired antibody;

wherein the composition comprises an amino acid sequence selected from the group consisting of SEQ ID NO. 1, SEQ ID NO. 2, SEQ ID NO. 3, SEQ ID NO. 4, SEQ ID NO. 5, SEQ ID NO. 6, SEQ ID NO. 7, SEQ ID NO. 8, SEQ ID NO. 9 and mixtures thereof; and

wherein the support surface comprises a material selected from: gold, zinc, cadmium, tin, titanium, silver, selenium, gallium, indium, arsenic, silicon, mixtures thereof and combinations thereof.

182. (Previously Presented) A composition according to claim 181 wherein the composition comprises a peptide.

183. (Previously Presented) A composition according to claim 181 wherein the epitope composition is conformationally constrained.

184. (Cancelled)

185. (Cancelled)

Application No. 10/527,678
Response 2

186. (Cancelled)

187. (Presently Amended) A composition according to claim 181 ~~185~~ wherein the composition is chemically bound to the support surface.

188. (Cancelled)

189. (Previously Presented) A composition according to claim 181 wherein the amyloid protofibrillar aggregate has a molecular weight in a range of about 1 kDa to about 100,000,000 kDa.

190. (Previously Presented) A composition according to claim 181 wherein the composition comprises a conformational epitope of an amyloid a protofibrillar aggregate that comprises five or more monomers.

191. (Presently Amended) A composition according to claim 181 wherein the ~~composition comprises a conformational epitope~~ comprises and epitope of a toxic species of an amyloid a protofibrillar aggregate.

192. (Withdrawn) A diagnostic kit useful for detecting a disease characterized by amyloid deposits, said kit comprising a composition an antibody that binds to a conformational epitope according to claim 181.

193. (Withdrawn) A diagnostic kit according to claim 192 wherein the amyloid fibril to which the conformational epitope contributes is substantially free of the epitope.

194. (Presently Amended) A composition according to claim 181 ~~185~~ wherein the epitope is chemically bound to the surface.

195. (Previously Presented) A composition according to claim 194 wherein the epitope comprises a peptide and a C terminus of the peptide is bound to the surface.

Application No. 10/527,678
Response 2

196. (Previously Presented) A composition according to claim 195 wherein the C terminus is bound to the surface by a carboxy thiol linkage.

197. (Previously Presented) A composition according to claim 196 wherein the surface comprises a gold surface.

198. (Previously Presented) A composition according to claim 197 wherein the gold surface comprises colloidal gold.

199. (Previously Presented) A composition according to claim 181 wherein the epitope comprises an epitope of A β .

200. (Previously Presented) A composition according to claim 181 wherein the epitope is coupled to gold.

201. (Previously Presented) A composition according to claim 200 wherein the epitope comprises a peptide and a C terminus of the peptide is coupled to gold.

202. (Previously Presented) A composition according to claim 201 wherein the gold comprise colloidal gold.

203. (Presently Amended) A composition according to claim 181 ~~185~~ wherein the surface comprises a surface of a film.

204. (Presently Amended) A composition according to claim 181 ~~185~~ wherein the surface comprises a surface of a sheet.

205. (Presently Amended) A composition according to claim 181 ~~217~~ wherein the surface comprises a surface of a pleated sheet.

Application No. 10/527,678
Response 2

206. (Presently Amended) A composition according to claim 181 ~~185~~ wherein the surface comprises a surface of a protein.